

AMENDMENTS TO THE CLAIMS

1. (canceled).

2. (previously amended) The system of claim 41, wherein said predetermined tool design comprises a second tool section, sintered separately from said first tool section, receiving said joint component of said first tool section in a second tool section receiving area.

3. (previously amended) The system of claim 2, wherein said predetermined tool design further comprises a plurality of joint components and receiving areas distributed on both said first tool section and said second tool section for coupling together sections for forming said larger tool.

4. (previously amended) The system of claim 3, wherein said first tool section and said second tool section define holes aligned during an assembly process of said larger tool, wherein said first tool section and said second tool section holes receive at least one pin aligning said first tool section with said second tool section.

5. (previously amended) The system of claim 41, wherein said predetermined tool design further comprises a plurality of sections of said larger tool, sintered separately from said first tool section, at least one of said plurality of sections receiving said joint component of said first section in a receiving area, said plurality of sections fitting together in a predetermined manner.

6. (previously amended) The system of claim 41, wherein said joint component comprises a tongue feature or a tongue feature comprising a cross pin for aligning said tongue feature with a second section receiving area.

7. (previously amended) The system of claim 41 further comprising a first heat sink positioned within said tool chamber for cooling said joint component or a second predetermined feature of said at least one other tool section, thereby limiting warping of said joint component or

said predetermined feature during sintering of said first tool section and said at least one other tool section.

8. (previously amended) The system of claim 41, wherein said predetermined tool design comprises a buffer feature protecting said joint component or a second predetermined feature of said at least one other tool section such that said buffer feature is primarily affected by heat generated during sintering in an area of said joint component or a second predetermined feature of said at least one other tool section.

9. (previously amended) The system of claim 41, wherein individual contoured details of said first tool section and said at least one other section are sintered or manufactured during separate operations and said tool sections are later coupled together at predefined locations on said tool sections.

10. (previously amended) The system of claim 41 further comprising a plurality of predetermined features comprising said joint component, wherein all of said plurality of predetermined features are designed on one side of said tool sections.

11 – 40. (canceled)

41. (currently amended) A sintering system comprising:
a tool chamber enclosing a sinter material comprising a laser fusible sinter powder;
a laser system sintering said sinter material as a function of controller signals; and
a controller generating said controller signals as a function of a predetermined tool design, said predetermined tool design including a first tool section and at least one other tool section that are sintered separately and later coupled together, each of said first tool section and said at least one other tool section having a plurality of predetermined features; said first tool section comprising a joint component for coupling together said first tool section and said at least

one other tool section, said at least one other tool section receiving said joint component in a tool section receiving area, said first tool section and said at least one other tool section fitting together in a predetermined manner to form a larger tool, said joint component comprising a first tongue feature on a first mating edge of said first section and said second section includes a first groove feature on a first mating edge thereof for receiving said first tongue feature.